

Docket No. 55573 (71526)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:

Mishina, et al.

SERIAL NO .:

09/786,309

GROUP: 1635

FILED:

June 6, 2001

EXAMINER: Nguyen, L

FOR:

HIGHLY EFFICIENT MUTAGENESIS METHOD WITH THE USE OF

PSORALEN DERIVATIVES

Honorable Commissioner of Patents and Trademarks Washington, DC 20231

Sir

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted by facsimile to Group 1600 of the U.S. Patent & Trademark Office by facsimile number 703-872-9306 on <u>December 29, 2001</u>.

AMENDMENT

In response to the Office Action issued on August 29, 2001, Applicants request that the above-identified application be amended as follows.

IN THE CLAIMS

Please add new claims 8-22 as follows:

8.

(new) A mutagenesis/method of a gene of a vertebrate animal, comprising the

treating a germ cell of the vertebrate animal with a psoralen derivative;

irradiating the germ cell with a high energy beam; and b)

subjecting the irradiated germ cell to artificial fertilization to induce mutagenesis c) in an embryo.

(new) A method according to claim 8, wherein the germ cell is sperm. 9.